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UNITED STATES DISTRICT COURT

CENTRAL DISTRICT OF CALIFORNIA

WESTERN DIVISION

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| UNITED STATES OF AMERICA and STATE OF CALIFORNIA,<br><br>Plaintiffs,<br><br>v.<br><br>MONTROSE CHEMICAL CORPORATION OF CALIFORNIA, et al.,<br><br>Defendants.<br><br>and RELATED COUNTER, CROSS, AND THIRD PARTY ACTIONS. | NO. CV 90-3122-R<br><br>PLAINTIFFS' MEMORANDUM IN OPPOSITION TO DEFENDANTS' MOTION TO EXCLUDE PLAINTIFFS' EVIDENCE RELATED TO (1) OCEAN DUMPING AND (2) LACSD DATA FROM 1969-1975<br><br>Date: October 2, 2000<br>Time: 10:00 a.m.<br>Place: Courtroom 8<br>Judge: Honorable Manuel L. Real |

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## INTRODUCTION AND SUMMARY OF ARGUMENT

Plaintiffs the United States of America and the State of California submit this memorandum in opposition to the DDT defendants' Motion to Exclude Plaintiffs' Evidence Related to (1) Ocean Dumping and (2) LACSD Data From 1969-1975.[1]

The defendants seek to exclude the evidence that Montrose arranged to dump at sea acid wastes which contained hundreds of tons of DDT.[2] Montrose makes the astounding argument that evidence of such dumping is not relevant. As the plaintiffs will show herein, that evidence is relevant on a number of fronts.

The defendants claim that the LACSD data from 1969-1975 is insufficiently reliable to be admitted into evidence. They point to snippets of deposition testimony in an attempt to cast doubt on LACSD's sampling procedures and means of analyzing those samples. However, in so arguing, the defendants really miss the point. First, when all the information from that time period is considered, a pattern becomes evident, *i.e.*, that Montrose was discharging hundreds of pounds of DDT each day into the sewer system. While plaintiffs may not be able to quantify the amount discharged per day with exact precision the exact amount discharged each day, it is clear that the amount discharged to the sewers was extremely large. Second, Montrose's own contemporaneous testing validates LACSD's tests. Finally, this data constitutes the only contemporaneous sampling of Montrose's effluent, it is extremely probative of the issues in this litigation, and to exclude it would be extremely prejudicial.

Finally, the defendants claim that John Redner must be excluded as a witness because he is offering expert opinions in the guise of a lay witness. This is simply not so. Mr. Redner is a long time employee of LACSD; he ran the program which surveyed the sewers looking for the source of the DDT; and he wrote the reports which compiled the results of those surveys. His

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[1] The DDT Defendants are Chris-Craft Industries, Inc., Atkemix Thirty-Seven, Inc., Aventis CropScience USA Inc. (formerly Rhône-Poulenc Ag), and Montrose Chemical Corporation of California.

[2] Plaintiffs' note that the defendants did not disclose in the Pre-Trial Order that they would be filing this motion. *See* Pre-Trial Order at 55-56.

testimony is about what he did at the time. To the extent it contains any opinions at all, they are of the sort which the Ninth Circuit permits of lay witnesses. Those opinions certainly are not "expert."

## ARGUMENT

### I. OCEAN DUMPING EVIDENCE IS RELEVANT TO PLAINTIFFS NATURAL RESOURCES DAMAGE CLAIM

Plaintiffs' seek damages for injury to natural resources resulting from Montrose's release of DDT to the Pacific Ocean, pursuant to CERCLA § 107(a)(1-4)(C). From the beginning of this case, and continuing through the present, plaintiffs have alleged that Montrose released DDT to the waters of the Southern California Bight through multiple pathways; primarily via the sewer system to the Palos Verdes Shelf, but also through ocean dumping near Catalina Island.[3] One of the ultimate facts remaining to be proven at trial is whether Montrose released DDT to the Pacific Ocean. Evidence of Montrose's ocean dumping of DDT-contaminated acid waste is clearly relevant to this issue and defendants' motion to exclude such evidence should be denied.

#### A. The Federal Rules of Evidence Provide a Liberal Standard for Relevancy.

The Federal Rules set forth a liberal standard for relevance. *See Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579, 587, 113 S.Ct. 2786, 125 L.Ed. 469 (1993); *see also United States v. Perkins*, 156 F.3d 1241 (table), 1998 WL 537845, **1 (9th Cir. 1998). Federal Rule of Evidence 402 provides that "[a]ll relevant evidence is admissible," while the term "relevant evidence" is defined by Rule 401 as "evidence having any tendency to make the existence of any fact that is of consequence to the determination of the action more probable or less probable than it would be without the evidence." Federal Rules of Evidence 401, 402.

The "facts of consequence" for plaintiffs' claims are set forth in the Pre-Trial Order, which became the controlling document in this matter when signed by the Court on August 28, 2000. *See* Local Rule 9.8.3. These "facts of consequence" include the fact that "the Montrose

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[3] Plaintiffs also allege that Montrose released DDT to the Los Angeles Harbor via storm water pathways emanating from the Montrose Plant. *See* Pre-Trial Order at 9.

Plant released DDT to the Pacific Ocean." Pre-Trial Order at 8. Thus, for this Court to find evidence of ocean dumping relevant, plaintiffs need only show that evidence that Montrose dumped hundreds of tons of DDT-contaminated acid waste directly into the ocean will have "any tendency" to make more probable the existence of the fact that Montrose released DDT into the ocean. It is incontestable that ocean dumping evidence is relevant to this ultimate fact. Indeed, it is difficult to conceive of any evidence which would be more relevant to the issue of whether Montrose released DDT to the ocean.

**B. Montrose's Ocean Dumping of DDT Damaged Southern California Bight Natural Resources.**

**1. Montrose arranged to have several hundred tons of its DDT-contaminated acid waste dumped in the waters of the Southern California Bight.**

The evidence of ocean dumping unequivocally supports plaintiffs' contention that the Montrose Plant released DDT to the Pacific Ocean.[4] From 1947 until 1960, Montrose arranged to have its DDT-contaminated waste acid dumped in the waters of the Southern California Bight. Montrose's own records reflect that the acid waste dumped at sea contained DDT. Declaration of John A. Saurenman in Support of Plaintiffs' Opposition to Defendants' Motion to Exclude Plaintiffs' Evidence Related to (1) Ocean Dumping and (2) LACSD Data from 1969-1975 (Saurenman Dec.), Exh. 1 (Stauffer Appropriation Request submitted by B. Bratter, dated June 26, 1956). During the DDT manufacturing process, waste acid was supposed to be separated by gravity from molten DDT in a 22,000 gallon tank. When sufficient time was allowed for the separation process to take place, only trace amounts of DDT would contaminate the acid waste.

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[4] Much of the historical information identified below was initially compiled in a 1985 report by Allan Chartrand on behalf of the California Regional Water Quality Control Board, Los Angeles Region ("LARWQCB") entitled "Ocean Dumping Under Los Angeles Regional Water Quality Control Board Permit: A Review of Past Practices, Potential Adverse Impacts, and Recommendations for Future Action" ("Ocean Dumping Report"), Saurenman Dec., Exh. 2. The Ocean Dumping Report is a non-hearsay public report. *See* F.R.E. 803(8). Allan Chartrand also provided written direct testimony in this action regarding Montrose's ocean dumping of DDT-contaminated wastes. *See* Direct Testimony of Allan B. Chartrand, Saurenman Dec., Exh. 3.

As noted in the 1956 Stauffer Chemical appropriation request, however, Montrose did not always allow the separation process to run its course:

> During a period of unbalance, the separator acid storage tank is susceptible to a very rapid accumulation of DDT. As the amounts of DDT build up in this tank the % of DDT in the shipped [to sea] acid increases. This varies from a trace to 9% DDT. [Exh.1at 2.]
>
> * * *
>
> During a recent 6 week period when the accumulation of DDT in the separator acid storage tank was high, samples were taken on half of the shipments sent to sea. Each sample was analyzed for % DDT. The amount lost was 15,000 pounds of DDT, and the total amount lost to sea during this period was 30,000 pounds. (*Id.* at 3.)

Mr. Bratter, assuming that a similar high volume period occurs once per year, concluded that Montrose was "losing" 40,000 pounds of DDT at sea on an annual basis. *Id.*

Montrose contracted with the California Salvage Company ("Cal Salvage") for the ocean disposal of its waste acid. Saurenman Dec., Exh. 4 (Depo. of John Kallock dated Sept. 15, 1998) at 155.[5] According to former Montrose plant manager John Kallock, Cal Salvage would "come in with a tank truck and we would load up the tank truck and he would transfer it to a barge." *Id.* The DDT-contaminated acid waste was not put in barrels, but rather "shipped in bulk in a truck." Saurenman Dec., Exh. 5 (Depo. of B. Bratter dated June 4, 1997) at 540. Cal Salvage transported Montrose's acid waste to the docks where it was pumped into their barges. Saurenman Dec., Exh. 5 (Depo. of B. Bratter dated June 2, 1997) at 131.

The Cal Salvage barges were pulled out to sea, where they dumped Montrose's DDT-contaminated acid wastes in the waters of the Southern California Bight at an area lying in

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[5] Defendants state that plaintiffs never focused on Montrose's ocean dumping of DDT-contaminated acid waste in "any testimony elicited through deposition." Mot. to Exclude at 6. This is simply incorrect. Plaintiffs elicited deposition testimony on the topic of ocean dumping from numerous former Montrose employees. *See, e.g.*, Saurenman Dec., Exh. 4 (Depos. of J. Kallock (9/15/99; 9/17/98)); Exh. 6 (F. Suhrer (7/30/96; 8/1/96)); and Exh. 5 (B. Bratter (6/2/97; 6/4/97)).

Latitude 33° 32 minutes North, Longitude 118° 27 minutes West ("Dumpsite 2").[6] This location lies approximately seven miles east of Catalina Island. In 1949, Raye King of the Industrial Waste Division of the Office of the Los Angeles County Engineer drafted a memorandum in which he described Cal Salvage's ocean dumping practices: "The acid sludge is discharged through four 4" openings in the bottom of the barge and is pumped under-water while the barge is in motion. The length of time of the discharge averages about 1 ½ hours, during which time the barge scribes a complete circle."[7] Mr. King further stated that at that time Cal Salvage was ocean dumping in excess of 400 barrels of Montrose (Stauffer Chemical) acid waste per week. *Id.* at 3. According to Industrial Waste Division records, the annual quantity of Montrose DDT-contaminated acid waste ocean dumped by Cal Salvage ranged from 20,830 barrels in 1949 to at least 27,340 barrels for the period August 1957 through July 1958.[8]

In the Ocean Dumping Report, Chartrand estimated that Montrose had dumped between 348 tons (assuming 0.5% DDT concentration in acid waste) and 696 tons (assuming 1.0% concentration) of DDT in the waters of the Southern California Bight from 1947 through 1960. Saurenman Dec., Exh. 2. Indeed, even based on Montrose's own estimate of 40,000 pounds of DDT dumped at sea each year, Montrose dumped approximately 280 tons of DDT in the ocean

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[6] *See* Saurenman Dec., Exh. 7 (Ltr. from W. Hutchison to L. Meyerson dated July 27, 1966) at 2. Cal Salvage dumped its initial load of waste at an area lying in Latitude 33° 37 minutes North, Longitude 118° 40 minutes West ("Dumpsite 1"), but shifted to Dumpsite 2 after the maiden voyage due to Dumpsite 1 being in line with the Navel Weapons Firing Range. Saurenman Dec., Exh. 8 (Ltr. from M. Hutchison to L. Meyerson dated May 23, 1968).

[7] *See* Saurenman Dec., Exh. 10 (Memo. from R. King to J. Partin dated Mar. 2, 1949) at 1. This evidence contradicts defendants' unsupported assertion that Montrose's DDT-contaminated acid waste was disposed of in "sealed containers." *See* Mot. to Exclude at 8 n.9. Montrose's acid waste was shipped in bulk and pumped directly into the waters of the Southern California Bight. References to "barrels" in the exhibits relate to the quantitative measurement (*i.e.* 42 gallons) rather than a description of waste shipment practices. Cal Salvage did not begin disposing of containerized waste materials until 1961, after it had ceased disposing of Montrose's DDT-contaminated acid wastes. *See* Exh. 7; Exh. 2 at 8.

[8] The tables reflecting these figures have been marked for identification as Pls. Exs. 366, 572, 591, and 619. *See* Saurenman Dec., Exh. 10. The figure for the period August 1957 through July 1958 does not include data for the month of October 1957.

over the fourteen year period. Thus, the ocean dumping evidence shows that Montrose released massive quantities of DDT in the Pacific Ocean and in close proximity to the Southern California Bight natural resources at issue in this case.

**2. Discharge of Montrose DDT to the Pacific Ocean resulted in injury to Southern California Bight natural resources.**

Defendants do not contend that the ocean dumping evidence does not provide facts in support of the issues set forth in the Pre-Trial Order. Rather, defendants attempt to manipulate the liberal relevancy standard by (i) unilaterally asserting that plaintiffs' natural resources damage claim is based solely on Montrose's release of DDT through the sewer system to the Palos Verdes shelf; and (ii) alleging that plaintiffs cannot show that Montrose's ocean dumping of hundreds of tons of DDT-contaminated acid waste resulted in injury to various bird species. Mot. to Exclude at 2-3. Defendants' arguments are disingenuous at best and should be rejected.

Plaintiffs addressed both of these issues less than one month ago in their Opposition to Defendants' Motion for Summary Judgment.[9] In the Opposition, plaintiffs once again spelled-out their natural resources damage claim; Montrose injured the natural resources of the Southern California Bight by releasing DDT to the ocean through various pathways – including ocean dumping. Opp. to Mtn for Summ. J. at 12. The injury to the Southern California Bight natural resources is due to the presence of Montrose DDT *throughout* the Southern California Bight entering the food web. Contrary to Defendants' assertion, Plaintiffs have never limited their natural resources damage claim to injury caused by the 100 tons of DDT present in the Palos Verdes Shelf sediments.[10]

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[9] The Opposition of Plaintiffs United States and State of California to Defendants' Motion for Summary Judgment on Count I and Portions of Count II Relating to the Palos Verdes Shelf ("Opp. to Mtn for Summ. J.") was filed on August 21, 2000.

[10] Defendants misconstrue the United States' position as set forth in its Memorandum of Points and Authorities in Support of Summary Judgment on the CERCLA Counterclaims ("Counterclaims Motion"). In that pleading, the United States specifically stated that "Defendants liability arises from releases of Montrose's DDT to or from the Palos Verdes Shelf ***or Montrose's ocean dump sites***." Counterclaims Motion at 9 (emphasis added).

Defendants' assertion that, based on the testimonial and documentary evidence identified by plaintiffs, it cannot be shown that injury to Southern California Bight natural resources resulted from Montrose's ocean dumping of DDT is likewise inaccurate.[11] Plaintiffs' expert David Garcelon has submitted written direct testimony describing the pathway of DDT to the Catalina bald eagles, thereby establishing the causative link from Montrose DDT in the waters of the Southern California Bight to the injured natural resources. *See* Saurenman Dec., Exh. 11 (Direct Expert Testimony of David K. Garcelon) at 13-15.

Mr. Garcelon testified that:

> The properties of DDE, an organochlorine compound, make it such that it accumulates in the fat of animals. Smaller animals in the environment pass on the DDE in their bodies to the larger animals that feed on them. The process, called biomagnification, continues up the food-chain, so that the animals at the top of the food chain, like the bald eagle, accumulate greater amounts of DDE than the animals upon which it feeds. This process means that animals that are top predators like the eagle are at the greatest risk for the effects of DDE in their diet.

*Id.* at 13-14. Mr. Garcelon specifically testified as to DDT-concentration levels of the animals in the Catalina Island bald eagles' diet; fish, birds and marine mammals. While Mr. Garcelon found that the fish collected during his study contained moderate DDT concentrations, as a result of the biomagnification process discussed above, birds and marine mammals which feed on the contaminated fish contained high concentrations of DDT. *Id.* at 14-15. Mr. Garcelon further

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[11] Moreover, defendants' "causation" argument is procedurally improper. Defendants' effort to exclude evidence of ocean dumping as irrelevant is in effect a motion for directed verdict, as it is based on the alleged fact that "all testimonial and documentary evidence having been identified." Mot. to Exclude at 1. Trial has yet to begin and while it is true that majority of witnesses' direct testimony has been submitted by affidavit, it is likewise true that these witnesses shall provide live testimony emphasizing aspects of their affidavits. *See* June 26, 2000 Order at 2. Plaintiffs are entitled to put on their entire case in chief prior to defendants moving for directed verdict. Defendants' "motion to exclude" is thus procedurally improper and should be rejected on that basis.

testified regarding the specific harm suffered by the bald eagles of Catalina Island due to their ingestion of DDT-contaminated prey.[12] *Id.* at 15-18.

Plaintiffs' do not need an expert to testify that the DDT-contaminated fish off the coast of Catalina Island became contaminated by ingesting DDT. The Court may take judicial notice of the fact that DDT is not a naturally occurring substance in fish. *See* Federal Rule of Evidence 201. Plaintiffs have, however, submitted evidence that Montrose's ocean dumped DDT remains bioavailable to fish and is a source of DDT contamination in benthic fish and benthic invertebrates at the bottom of the food chain.[13]

As noted by defendants, Allan Chartrand raised questions regarding the bioavailability of Montrose's ocean- dumped DDT. Ocean Dumping Report at 17. Because of these uncertainties, the Los Angeles Regional Water Quality Control Board ("LARWQCB") further investigated whether ocean-disposed wastes were impacting the environment. In 1987, LARWQCB received a report entitled "Distribution of Organic Contaminants in Coastal Areas of Los Angeles and the Southern California Bight," prepared by the Institute of Marine Sciences at the University of California, Santa Cruz ("IMS Report").[14] The IMS Report provides ample evidence that

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[12] Defendants should not be surprised that such evidence is before the Court, as much of this information was set forth in plaintiffs' Opposition to Motion for Summary Judgment. *See* Opp. to Mtn. for Summ. J. at 12-15.

[13] *See* Saurenman Dec., Exh. 12 (Institute of Marine Sciences, "Distribution of Organic Contaminants in Coastal Areas of Los Angeles and the Southern California Bight" (1987) (submitted to the California Regional Water Quality Control Board, Los Angeles Region)); Exh. 13 (M.I. Venkatesan, "DDTs and dumpsite in the Santa Monica Basin, California," 179 *The Science of the Total Env.*, 1996) at 61-71.

[14] This Court has previously excluded the testimony Robert W. Risebrough, the principal investigator in the collection of the data and the preparation of the IMS Report. Plaintiffs again make an offer of proof that Robert Risebrough could and would competently testify as an expert on this issue if he were allowed to do so. *See* Saurenman Dec., Exh. 14 (Proffered Direct Testimony of R. Risebrough) at 19, 23-29; Exh. 15 (Risebrough Expert Report) at 9-11,14, and 30-32.

Montrose's ocean-disposed DDT was present in the marine environment, including in the sediments, the benthic invertebrates, and in the benthic fish.[15]

The IMS Report sets forth the question at issue:

> The principal question relevant to this study would appear to be: are the organic contaminants in the sediment available to the benthic food webs, or have they been effectively removed from circulation in the food webs? (IMS Report at 51.)

The answer is unequivocal:

> The ratios among the DDT compounds in the Munidopsis [a crab species] from Station B [Dumpsite 2] including the ratio of DDE to total DDT and o,p'-DDT to p,p'-DDT (Table A.6) indicate that the sediments are sources of these compounds to the food webs.

*Id.* Moreover, the Institute of Marine Sciences found that "benthic fish living on the bottom of the San Pedro Basin have accumulated high levels of both DDT and PCB compounds." *Id.* at 54. Thus the Montrose DDT dumped into the ocean off of Catalina Island was not only in the water column from the time it was first dumped, but in the food web as well.

Thus, to prove their claim under CERCLA § 107(a)(1-4)(C), plaintiffs will show at trial that – among other pathways of release from the Montrose Plant – Montrose dumped hundreds of tons of DDT off the coast of Catalina Island and that DDT contamination of the Southern California Bight food chain is a substantially contributing factor to the injury to the Catalina Island bald eagles.[16] *See In re Acushnet River & New Bedford Harbor: Proceedings re Alleged PCB Pollution*, 722 F. Supp. 893, 897, 901 (D. Mass. 1989). Evidence relating to Montrose's ocean dumping of acid waste containing hundreds of tons of DDT is relevant to ultimate facts

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[15] The IMS Report is a non-hearsay public record. *See* FRE 803(8).

[16] The term "substantially contributing cause" effectively means that Montrose's DDT must not be a *de minimus* cause. As the Supreme Court of California has phrased it, "The substantial factor standard is a relatively broad one, requiring only that the contribution of the individual cause be more than negligible or theoretical . . . each of several actors or forces acting concurrently to cause an injury is a legal cause of the injury regardless of the extent to which each contributes to the injury." *Rutherford v. Owens-Illinois, Inc.*, 16 Cal.4th 953, 978, 941 P.2d 1203, 1220 (1997).

needed to prove plaintiffs' claim for natural resource damages. Defendants' motion to exclude plaintiffs ocean dumping evidence should be denied.

**C. Montrose's Ocean Dumping is Relevant to CERCLA Apportionment.**

CERCLA § 113(f)(1) expressly provides that "the court may allocate response costs among liable parties using such equitable factors as the court determines are appropriate." Title 42 U.S.C. § 9613(f)(1). The Ninth Circuit has found that "this language gives district courts discretion to decide what factors ought to be considered, as well as the duty to allocate costs according to those factors." *Boeing Company v. Cascade Corporation*, 207 F.3d 1177, 1187 (9th Cir. 2000). Noting that "Congress rejected the amendment that would have listed the so-called Gore Factors as the basis for allocation liability," the *Boeing* court held that the trial court may consider but is not limited to the Gore Factors, because the statutory language gives the trial court discretion to consider "such equitable factors as it finds appropriate."[17] *Boeing Company*, at 1187.

In this case, apportionment of responsibility is informed by the respective volume of DDT pollution attributable to Montrose, as opposed to other sources (such as the approximately 5 ½ lbs. of DDT that may have made its way into the ocean from the Stringfellow site releases). Volume is the second Gore Factor. It is also a factor that may be used *as the primary or exclusive basis for allocation*, as the Ninth Circuit has expressly recognized. *Boeing Company*, at 1188. The appropriate comparison is between the total amount of DDT that Montrose has contributed to the Southern California Bight vis-à-vis the State's comparatively miniscule Stringfellow emissions. Montrose's contribution should be assigned in consideration of all of

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[17] The Gore Factors are: 1) the ability of the parties to demonstrate that their contribution to a discharge, release or disposal of a hazardous waste can be distinguished; 2) the amount of the hazardous waste involved; 3) the degree of toxicity of the hazardous waste involved; 4) the degree of involvement by the parties in the generation, transportation , treatment, storage, or disposal of the hazardous waste; 5) the degree of care exercised by the parties with respect to the hazardous waste concerned, taking into account the characteristics of such hazardous waste; and 6) the degree of cooperation by the parties with the Federal, State or local officials to prevent any harm to the public health or environment. See, *Centerior Serv. Co. v. Acme Scrap Iron & Metal Corp.*, 153 F.3d 344, 354 (6th Cir. 1998); *United States v. Colorado & Eastern R.R. Co.*, 50 F.3d 1530, 1536 n.5 (10th Cir. 1995).

the DDT it delivered to the ocean through whatever means – be that direct ocean dumping, dumping into the LACSD sewer and through the White Point Outfall System or through surface runoff that found its way to the ocean. Because comparative volume is such an important factor in determining CERCLA § 113(f)(1) equitable apportionment, the ocean dumping evidence could not be more relevant.

The ocean dumping evidence is also relevant to the fourth Gore Factor (the degree of involvement by the parties in the generation, transportation, treatment, storage, or disposal of the hazardous waste) and the fifth Gore Factor (the degree of care exercised by the parties with respect to the hazardous waste concerned, taking into account the characteristics of such hazardous waste). Montrose not only generated the DDT-laden acid waste, but can be fairly charged with its direct and active transportation to and disposal at sea.[18] Instead of containerizing the waste, it was dumped in bulk directly into the ocean. No care was taken to insulate or protect the environment from its harmful effects.

## II. THE LACSD EVIDENCE IS RELEVANT AND ADMISSIBLE

In 1970, Los Angeles County Sanitation Districts ("LACSD") sampled "where and in what concentration" chlorinated hydrocarbon pesticides and heavy metals existed in the LACSD sewer system. As a result of this sampling, LACSD published two main reports detailing the results of this work, as well as several monthly progress reports. John Redner participated in the research and authored the reports. Montrose's Vice-President of Operations at that time wrote to LACSD and confirmed that LACSD's DDT sampling results matched the results from Montrose's own lab. It is these reports (the "LACSD Reports"), along with the percipient testimony of John Redner (the "Redner Testimony"), that the DDT Defendants seek to exclude.

In their motion, the DDT Defendants distort the evidence at issue, confuse the applicable standards, and attempt to mislead this Court. Ultimately, their objections are little more than a

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[18] The DDT Defendants have recently asserted (wrongly) that the acts or omissions of the LACSD at the Joint Water Pollution Control Plant constitute an intervening cause with respect to the White's Point discharges. See Defendant's Opposition to "Supplemental" Motion for Partial Summary Judgment. They cannot make such an argument with respect to the ocean dumping.

weak commentary on the weight, not the admissibility, of the LACSD materials. Accordingly, their motion to exclude should be denied.

**A. Background**

Between 1947 and 1982, Montrose operated in Los Angeles, California, what was at times the world's largest DDT manufacturing facility (the "Plant"). For most of the years the Plant was in operation, the Plant discharged liquid wastes containing DDT to the LACSD sewers which discharged to the Joint Water Pollution Control Plant, and, from there, to the coastal ocean. In April 1970, prompted – by among other things – growing public awareness of the dangers of DDT contamination of the environment, the very LACSD sewer sampling data Montrose now seeks to exclude, Montrose voluntarily severed its connection to the LACSD sewer.

Prior to Montrose's cutoff, LACSD initiated a program to identify the major sources of DDT and other pesticides in the LACSD system. Shortly after this sampling survey began, Montrose was identified as the major discharger of DDT into the LACSD sewer. After Montrose was cut off, it hauled its caustic and process wastes to landfills. This waste, the same waste that previously went to the sewer, was sampled and proved to contain high concentrations of DDT. Moreover, sampling results from the sewer lines after Montrose severed its connection to the sewer line showed dramatically lower concentrations of DDT flowing from Montrose plant. And, when LACSD cleaned the sewer line that served the Montrose plant they found literally tons of DDT laden sediment clinging to the inside of the pipe. Finally, Montrose admitted that: (1) LACSD's 1970 sampling results were similar to the results of Montrose's own internal testing; and, (2) the 1970 samples reflected years of gradual decline in the amount of DDT waste being sent to the sewer.

Despite all of this, the DDT defendants now seek to exclude these highly probative test results, as well as the percipient testimony of John Redner, who, as 30-year LACSD veteran in charge of the DDT sampling program, is the person most qualified to testify about what LACSD did. This motion is another example of overreaching, and it should be denied.

**B. Applicable Legal Standards**

The DDT Defendants wrongly place a great deal of reliance on FRE 403, which provides that relevant testimony and evidence can be excluded only if the danger of "unfair prejudice, confusion, or misleading the jury" substantially outweighs the probative value of the evidence. FRE 403. This rule has substantially less force in the context of a bench trial. Moreover, when the evidence is viewed as a whole, it is clearly both highly probative and reliable and thus is admissible.

The DDT Defendants also miss the point when they allege that John Redner is offering expert testimony though he was not designated to do so. Lay witnesses can offer two types of testimony: (1) testimony that reflects their immediate perceptions ("percipient testimony") and, (2) opinion testimony which is "(a) rationally based on the perceptions of the witness and (b) helpful to a clear understanding of the witness' testimony or the determination of a fact in issue." F.R.E. 701. The mere fact that testimony by a lay witness reflects an opinion by that witness is not, in itself, sufficient grounds for excluding it. The few opinions contained in the Redner testimony were based on his own activities and were "common enough and require[d] such a limited amount of expertise" as to fall within the parameters of Rule 701 (lay opinion testimony). *See United States v. Figueroa-Lopez*, 125 F.3d 1241, 1245-1246 (9th Cir. 1997); *United States v. VonWillie*, 59 F.3d 922, 929 (9th Cir. 1995)

All of the DDT Defendants arguments about the LACSD data and Redner testimony go to weight, not admissibility. Accordingly, these materials should be admitted into evidence.

**C. The LACSD Data is Admissible.**

The DDT Defendants distort the nature of the LACSD data in order to attack it: *first*, they allege that the data in the LACSD Reports is so "unreliable and without foundation" that it must be stricken as "speculative, misleading, irrelevant and prejudicial"; *second*, they allege that John Redner, who has worked at LACSD for 30-years, spending many of those years working on the problem of DDT, does not have the experience necessary to offer a lay opinion that is rationally based on his perceptions of the LACSD sampling. These arguments are flawed.

The LACSD data was gathered using the best available technology of the time. The samples have been corroborated by subsequent sampling and Montrose's own testing – not to mention the tons of DDT on the Palos Verdes Shelf adjacent to Montrose. The DDT Defendants' arguments go to the weight this Court should accord the evidence; they have nothing to do with its admissibility.

The DDT Defendants argue that because the LACSD data from March 1970 reflects a snapshot rather than an "average," it is therefore "irrelevant." Mot. to Exclude at 10. This is absurd. No one has suggested that the March 1970 data represents the "average" concentration of DDT in Montrose's effluent – in fact, by Montrose's own admission, the average effluent over the course of the Plant's operation was probably higher.[19] The March 1970 sampling, when combined with other evidence does lead to the conclusion that Montrose was discharging hundreds of pounds of DDT daily to the sewers. Plaintiffs have no doubt that if they introduced an average measurement, the DDT Defendants would have objected that it was irrelevant because it did not measure DDT on any given day. The LACSD data is highly probative as the sole sampling for DDT in the Montrose effluent prior to the time Montrose was disconnected from the sewer system in April 1970 and prior to the time Montrose instituted major modifications in its waste handling practices. Even if it were only a snapshot, and if it were uncorroborated, it is still vital in understanding the DDT waste practices of the Plant more than 30 years ago.

However, there is substantial corroboration for the LACSD data:

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[19] In a June 16, 1970 letter to LACSD, A.R. Wilcox, the vice president of Montrose, wrote:

> During the past several years we have gradually reduced the quantity of DDT-like materials being discharged into the county sewer. This has resulted both from reducing the concentration in the water and also by reducing the quantity of water being discharged. Currently the quantity of water is about 1/3 of what it was 3 or 4 years ago and the concentration of DDT-like materials also considerably reduced.

Saurenman Dec., Exh. 16. Thus, at the time LACSD sampled in March 1970, Montrose's discharge of DDT was already reduced from even higher levels.

1. In another part of Redner's testimony, which the DDT defendants do not even attempt to attack, involves Redner's work on sediment removal operations in 1970 and 1971 which confirmed that there were tons of DDT deposits in the sewers downstream of the Montrose Plant. In addition, Redner has testified that he was involved in further sediment removal activities in the 1990s – conducted primarily by a contractor to Montrose – in which "more than 450,000 tons [sic – should be pounds] of DDT-contaminated sediments were removed from the sewer lines immediately downstream of the Montrose plant." Saurenman Dec., Exh. 17 (Redner Testimony) at ¶¶ 50-52.

2. There are over 100 tons of DDT in the sediments of the Palos Verdes shelf adjacent to the outfall for the sewer system which serviced the Montrose plant. (Saurenman Dec., Exh. 18 (Testimony of Homa J. Lee).

3. In March 1970, about 503 pounds of DDT per day was reaching the Joint Water Pollution Control Plant ("JWPCP"), but in May 1970, soon after the Montrose plant had been cut off of the sewer system, only 92 pounds per day of DDT was reaching the JWPCP. Redner Testimony ¶28.

4. In March 1970, before Montrose was cut off from the sewers, LACSD sampled sewers directly upstream and downstream of the Montrose Plant. Upstream of the Montrose Plant, LACSD found 7 pounds per day of DDT, and downstream of the Plant, LACSD found 654 pounds of DDT per day. Redner Testimony ¶ 22. In July 1971, over a year after the Montrose Plant was cut off of the sewers, LACSD sampled sewers directly upstream and downstream of the Montrose plant and found about 4 pounds of DDT in the upstream sewer but 46 pounds per day of DDT downstream of Montrose. Redner Testimony ¶ 30.

5. There is testimony about sampling of Montrose's waste water after Montrose had been cut off of the sewer system. That waste water – the same effluent that had previously been discharged to the sewers – was trucked to landfills, and that waste water was found to contain the equivalent of about 500 lbs of DDT per day. Redner Testimony at ¶ 31.

6. Montrose itself corroborated LACSD's analyses. In his June 16, 1970 letter to LACSD, Montrose's vice president wrote:

> Recently your personnel have monitored our effluent discharge for DDT content and your values have been found to correspond closely to current values being obtained in our local laboratories. Our analysis has shown the total of DDT and all its isomers and metabolites to range from somewhat below 1 ppm to about 5 ppm, which compares with your findings of slightly less than 5 ppm. Considering the complexity of the samples and sensitivity of these test procedures these results would be considered as checking each other.

Redner Testimony ¶¶ 35, 36; Saurenman Dec., Exh. 16. While this evidence does not allow a determination of the precise amount of DDT Montrose was discharging to the sewers prior to March 1970, it does permit the conclusion that Montrose was discharging hundreds of pounds of DDT per day to the sewers.

The defendants rely on *Kalamazoo River Study Group v. Rockwell International*, 107 F. Supp. 2d 817 (W.D. Mich. 2000), for the proposition that reliance on a single sampling point to extrapolate a total volume over a number of years is "speculative and not credible." Mot. to Exclude at 12. However, what the court there said was that a single sampling point "should not be the basis for extrapolation to a multi-year time period, at least not without sufficient corroborative evidence that the single point was representative." *Id.* at 826.[20] Here, the March 1970 sampling is corroborated by subsequent sampling of the sewers upstream and downstream of Montrose, and all of the sampling showed that Montrose was contributing significant amounts of DDT. And the later sampling of the waste going to the landfill also corroborated that the March 1970 sample was in fact representative. Finally, the accuracy of the LACSD analyses was established by Montrose itself as stated in the Wilcox letter of June 16, 1970. Even at a time when the amount of DDT in the samples was far lower than in March 1970, the LACSD laboratory and Montrose's laboratory were confirming each other's results. This is certainly

[20] Importantly, the *Kalamazoo* court did not exclude any of the proffered testimony but rather found that it was not as credible as other evidence.

sufficient corroborative evidence,[21] and it leads to the conclusion that Montrose's discharge to the sewers was massive.

**D. The DDT Defendants' Arguments Regarding the LACSD Evidence Go to Weight and Not Admissibility.**

DDT Defendants' allegations about the LACSD data involve three points:

A. The sampling may have been affected (though the DDT Defendants do not mention by how much) by the presence of "interferents" which might produce overestimates of DDT concentrations;

B. LACSD had no established procedures for holding times, sample storage conditions, or chain of custody, which the DDT Defendants' expert notes would "substantially weaken the data's credibility" (*see* Declaration of John Quensen III at 5, attached as Exh. 5 to the Declaration of Eric Katz filed in support of the DDT Defendants' motion);

C. LACSD made no attempt to do "representative" samples which would yield an "average" discharge concentration.

These assertions, even if true, make trivial commentary on the weight, not the admissibility of the LACSD evidence. Their conclusory nature demonstrates they are bluster: there is no demonstration of *how* or *why* sample storage conditions or holding times would affect the reliability of the sample results. Moreover, there is no demonstration of *how* and *to what degree* interferents would skew the sample results. And, as noted above, the argument that the LACSD evidence must be excluded because it represents a snapshot rather than an average is absurd. Finally, as shown above, the LACSD data is corroborated by other contemporaneous

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[21] In fact, in the absence of **any** sampling data, the *Kalamazoo* court found that the plaintiffs there had discharged hundreds of thousands of pounds of PCBs to the river. *See Kalamazoo*, 107 F. Supp. 2d at 835. While the court noted that it could not begin to arrive at a precise discharge figure, it could make its determination based on the companies' waste practices over the years and the high concentrations of PCBs in other parts of the companies' plants and the failure of the companies to quantify what they had discharged. *Id.* When viewed in this light, *Kalamazoo* becomes remarkably similar to this case with the exception that here there is direct sampling data for Montrose's discharge to the sewers.

evidence including the June 16, 2000, letter from Montrose's Vice-President of Operations, A.R. Wilcox, stating that LACSD's sampling results matched the results from Montrose's own laboratory.

Moreover, the evidence in fact contradicts the defendants' assertions regarding LACSD's analyses of the sewer samples. In a November 1970 memorandum, Raymond Stewart, then the head of the LACSD laboratory wrote:

> The validity of the practices used are evaluated by subjecting known concentrations of standards to identical conditions with unknown samples, by "spiking" sewage samples before extraction with a known amount of standard, through replicate testing of the same sample, by separations of the same sample by liquid phases differing in polarity, and by consulting literature or other laboratories for exchange of common experience [sic] problem solutions. Based on the above, we have considerable faith in the reliability of our data which increases as the body of data grows in statistical significance.

Stewart memorandum to Carry (11/20/70), Exhibit 15 to Katz Declaration.

In another memorandum, Stewart wrote:

> Where the DDT series has been high, such as below the Montrose Chemical plant, the total absence of the secondary peaks found in PCB standards would almost constitute sufficient justification for positive identification. Not satisfied with this degree of certainty, the Montrose Chemical samples have been chromatographed with different liquid phases for further confirmation.

Saurenman Dec., Exh. 19 (Stewart July 16, 1970 memo to Carry) at 2.[22] Thus, the defendants have distorted the record on the reliability of the LACSD data.

Even if the DDT Defendants' allegations had a basis in truth, exclusion of the LACSD Evidence would still be inappropriate. *See United States v. Chichilly*, 30 F.3d 1144, 1154 (9th Cir. 1994) (in federal assault with a deadly weapon case, being tried in front of jury, issue of potential mishandling of DNA samples went to weight not admissibility of sample results). Similarly, in *United States v. Hicks*, 103 F.3d 837, 844-846 (9th Cir. 1996), the defendant in a federal carjacking case argued that results of PCR DNA testing should be excluded since that method of DNA testing was "especially susceptible to contamination." The court noted that these concerns go to weight and not admissibility. *See also FDIC v. Catetter*, 1996 WL 292228, *2 (9th Cir.) ("Any deficiency in the sampling goes to the weight of the expert's opinion, not to its admissibility").

And even if the LACSD data were not as reliable as one might prefer, the likelihood of prejudice in the context of a bench trial is extraordinarily low. It is presumed the Court has the ability to distinguish a piece of evidence's probative worth from its prejudicial impact. *See United States v. Caudle*, 48 F.3d 433 (9th Cir. 1995) (even in a *criminal prosecution*, potential for prejudice in a bench trial without significance such that exclusion of evidence on grounds of potential prejudice is unwarranted). On balance, the LACSD data is highly probative: it is a contemporaneous, corroborated, and convincing picture of Montrose's massive DDT discharge into the sewers. The likelihood that this Court will be prejudiced by such data is extremely remote.

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[22] Rodger Baird, the current head of the LACSD's laboratory, also testified that interferences were not found in 1970 samples which showed high DDT levels. *See* Saurenman Dec., Exh. 20 (Baird Deposition) at 736-37; *see also* 382-386. He also testified that he cannot recall any situation during his employment at LACSD where he was made aware that grease had masked the presence of pesticides in samples taken from the various main sewer lines, the JWPCP, ocean sediments or fish tissue. *Id.* at 678-85. This is not surprising because by 1985, the levels of DDT which were being detected were more than 300 times lower than in 1970. Saurenman Dec., Exh. 21 (June 1985 Baird Memorandum to Miele) at 5. Baird has also testified that LACSD did track its samples in the early 1970s. Saurenman Dec., Exh. 22 (Direct Testimony of Rodger B. Baird) at ¶ 4.

**E. Redner's Testimony Is Appropriate Lay Opinion.**

John Redner is not testifying as an expert. His testimony reflects his perceptions and his lay opinions, rationally based on those perceptions and his 30 years of experience with LACSD. The DDT Defendants' attempt to portray his obviously fact testimony as expert testimony, and then complain that he is not on the governments' experts witness list. This is a transparent strawman. The entire basis for this assertion is that the LACSD "utilized scientific instruments to manipulate the samples and they extrapolated from a single composite sample to determine the daily waste stream from the Torrance plant over twenty years." The DDT Defendants then inexplicably cite to a 1997 South Carolina opinion, which attempts a definition of expert opinion.

The truth is not hard to divine: John Redner has offered his own recollections, based on personal knowledge, of what he did in preparing the LACSD reports on the survey of the sewer system to locate the discharger of the DDT. He has offered his own recollections, based on personal knowledge, of his work on the DDT-laden sediment removal project. He has offered his own recollections, based on personal knowledge, of his communications with Montrose personnel which tended to corroborate the LACSD sampling results. On the basis of all of these personal experiences, he has offered his opinion which is essentially that certain concentrations of DDT in the LACSD samples convert to certain amounts of DDT per day in the sewers.[23]

To the extent that there are any opinions at all in his testimony, Redner's opinions are clearly appropriate lay opinions. Unlike the Defendants' experts, who reviewed and analyzed reports prepared by others, Redner's testimony merely reflects his personal experiences and some opinions derived therefrom – essentially arithmetic calculations of the amount of DDT. Moreover, the DDT Defendants fall victim to their own distortions: Redner does not even offer

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[23] Indeed, most of Redner's testimony is proffered to authenticate LACSD documents and to qualify them under applicable exceptions to the hearsay rule, *e.g.* as business records and as ancient documents. These documents also permit the calculation of the amounts of DDT being transported in the sewers, and in the trucks hauling Montrose's waste to the landfill. These documents alone force the conclusion that Montrose was a major source of DDT to the sewer system. If this is the "opinion" which concerns the defendants, it clearly is an appropriate lay opinion because, given the information presented, it is a "common enough" observation that required a "limited amount of expertise." *See VonWillie*, 59 F.3d at 929.

an opinion about the average daily discharge of the Plant over twenty years. Rather, he presents data from a project with which he was directly involved and offers his own perceptions and not an expert analysis of someone else's work. His lay testimony is clearly admissible – again, the DDT Defendants arguments go to weight, not admissibility.

## CONCLUSION

For the foregoing reasons, plaintiffs respectfully submit that the defendants' motion must be denied.

Dated: September 18, 2000.

Respectfully submitted,

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DECLARATION OF SERVICE BY MAIL

**Re: UNITED STATES and STATE OF CALIFORNIA v. MONTROSE CHEMICAL CORPORATION OF CALIFORNIA, et al., U.S.D.C., C.D. CAL. No. CV 90-3122-R**

I, John A. Saurenman, declare that I am over 18 years of age, and not a party to the within cause; my business address is 300 South Spring Street, Los Angeles, California 90013; I served a copy of the attached

PLAINTIFFS' MEMORANDUM IN OPPOSITION TO DEFENDANTS' MOTION TO EXCLUDE PLAINTIFFS' EVIDENCE RELATED TO (1) OCEAN DUMPING AND (2) LACSD DATA FROM 1969-1975

on each of the following, by placing same in an envelope(s) addressed as follows:

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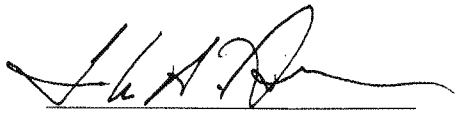
Each said envelope was then, on September 18, 2000, sealed and deposited in United Parcel Service for overnight delivery with the postage thereon fully prepaid.

I declare under penalty of perjury that the foregoing is true and correct, and is executed on September 18, at Los Angeles, California.



Declarant